

COMMONWEALTH OF VIRGINIA
STATE AIR POLLUTION CONTROL BOARD
REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

9 VAC 5 CHAPTER 40.
EXISTING STATIONARY SOURCES.

PART II.
Emission Standards.

ARTICLE 29.
Emission Standards For Can Coating Application Systems (Rule 4-29).

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9 VAC 5-40-4010. Applicability and designation of affected facility.

A. Except as provided in subsection C of this section, the affected facility to which the provisions of this article apply is each can coating application system.

B. The provisions of this article apply only to sources of volatile organic compounds in volatile organic compound emissions control areas designated in 9 VAC 5-20-206.

C. The provisions of this article do not apply to coating application systems used exclusively for determination of product quality and commercial acceptance provided:

1. The operation is not an integral part of the production process;
2. The emissions from all product quality coating application systems do not exceed 400 pounds in any 30 day period; and

3. The exemption is approved by the board.

9 VAC 5-40-4020. Definitions.

A. For the purpose of these regulations and subsequent amendments or any orders issued by the board, the words or terms shall have the meaning given them in subsection C of this section.

B. As used in this article, all terms not defined here shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless otherwise required by context.

C. Terms defined.

"Application area" means the area where the coating is applied by spraying, dipping or flow coating techniques.

"Carbon adsorption system" means a device containing activated carbon as the adsorbent material, an inlet and outlet for exhaust gases, and a system to regenerate the saturated adsorbent. The carbon adsorption system must provide for the proper disposal or reuse of all volatile organic compounds in the adsorbate.

"Coating applicator" means an apparatus used to apply a surface coating.

"Coating application system" means any operation or system where a surface coating of one type or function is applied, dried or cured and which is subject to the same emission standard. May include any equipment which applies, conveys, dries or cures a surface coating, including, but not limited to, spray booths, flow coaters, flashoff areas, air dryers, drying areas and flashoff area or drying area to be included in this definition.

"Flashoff area" means the space between the application area and the oven.

"Oven" means a chamber within which heat is used to bake, cure, polymerize or dry a surface coating or any combination of those.

9 VAC 5-40-4030. Standard for volatile organic compounds.

A. Sheet basecoat (exterior and interior) and overvarnish; two-piece can exterior (basecoat and overvarnish).

1. No owner or other person shall cause or permit the discharge into the atmosphere from a coating application system any volatile organic compound in excess of 2.8 pounds per gallon of coating, excluding water, as delivered by the coating

applicator.

2. Achievement of the emission standard in subsection A 1 of this section by use of methods in 9 VAC 5-40-4040 A will be acceptable to the board.

B. Two-piece and three-piece can interior body spray; two-piece can exterior end (spray or roll coat).

1. No owner or other person shall cause or permit the discharge into the atmosphere from a coating application system any volatile organic compound in excess of 4.2 pounds per gallon of coating, excluding water, as delivered by the coating applicator.

2. Achievement of the emission standard in subsection B 1 of this section by use of methods in 9 VAC 5-40-4040 B will be acceptable to the board.

C. Three-piece can side-seam spray.

1. No owner or other person shall cause or permit the discharge into the atmosphere from a coating application system any volatile organic compound in excess of 5.5 pounds per gallon of coating, excluding water, as delivered by the coating applicator.

2. Achievement of the emission standard in subsection C 1 of this section by use of methods in 9 VAC 5-40-4040 C will be acceptable to the board.

D. End sealing compound coating.

1. No owner or other person shall cause or permit the discharge into the atmosphere from a coating application system any volatile organic compound in excess of 3.7 pounds per gallon of coating, excluding water, as delivered by the coating applicator.

2. Achievement of the emission standard in subsection D 1 of this section by use of methods in 9 VAC 5-40-4040 D will be acceptable to the board.

E. No owner or other person shall use any coating system or equipment unless reasonable precautions are taken to minimize the discharge of emissions from cleaning or purging operations. Reasonable precautions may include the following:

1. The use of capture or control devices or both;
2. The use of detergents, high pressure water, or other non-volatile cleaning methods;
3. The minimization of the quantity of volatile organic compounds used

to clean lines of equipment; and

4. The adjustment of production schedules to minimize coating changes thereby reducing the need for frequent cleaning or purging of a system.

9 VAC 5-40-4040. Control technology guidelines.

A. Sheet basecoat (exterior and interior) and overvarnish; two-piece can exterior (basecoat and overvarnish). The control technology should consist of one or more of the following:

1. Use of electrodeposited waterborne coatings;
2. Use of ultraviolet coatings;
3. Use of high solids coatings;
4. Carbon adsorption; and
5. Incineration; or

6. Any technology of equal or greater control efficiency when compared to the use of coating complying with 9 VAC 5-40-4030 A 1, provided such technology is approved by the board.

B. Two-piece and three-piece can interior body spray; two-piece can exterior end (spray or roll coat). The control technology should consist of one or more of the following:

1. Use of waterborne coatings;
2. Use of powder coatings;
3. Use of high-solids coatings;
4. Carbon adsorption; and
5. Incineration; or

6. Any technology of equal or greater control efficiency when compared to the use of coating complying with 9 VAC 5-40-4030 B 1, provided such technology is approved by the board.

C. Three-piece can side-seam spray. The control technology should consist of one or more of the following:

1. Use of waterborne coatings;
2. Use of powder coatings; and
3. Use of high solids coatings; or
4. Any technology of equal or greater control efficiency when compared to the use of coating complying with 9 VAC 5-40-4030 C 1, provided such technology is approved by the board.

D. End sealing compound coating. The control technology should consist of one or more of the following:

1. Use of waterborne coatings;
2. Use of high-solids coatings; or
3. Any technology of equal or greater control efficiency when compared to the use of coating complying with 9 VAC 5-40-4030 D 1, provided such technology is approved by the board.

9 VAC 5-40-4050. Standard for visible emissions.

The provisions of Article 1 (9 VAC 5-40-60 et seq.) of this chapter (Emission Standards for Visible Emissions and Fugitive Dust/Emissions, Rule 4-1) apply.

9 VAC 5-40-4060. Standard for fugitive dust/emissions.

The provisions of Article 1 (9 VAC 5-40-60 et seq.) of this chapter (Emission Standards for Visible Emissions and Fugitive Dust/Emissions, Rule 4-1) apply.

9 VAC 5-40-4070. Standard for odor.

The provisions of Article 2 (9 VAC 5-40-130 et seq.) of this chapter (Emission Standards for Odor, Rule 4-2) apply.

9 VAC 5-40-4080. Standard for toxic pollutants.

The provisions of Article 3 (9 VAC 5-40-160 et seq.) of this chapter (Emission Standards for Toxic Pollutants, Rule 4-3) apply.

9 VAC 5-40-4090. Compliance.

- A. The provisions of 9 VAC 5-40-20 (Compliance) apply.
- B. The emission standards in 9 VAC 5-40-4030 apply coating by coating or to

the volume weighted average of coatings where the coatings are used on a single coating application system and the coatings are the same type or perform the same function. Such averaging shall not exceed 24 hours.

C. Compliance determinations for control technologies not based on compliant coatings (i.e., coating formulation alone) shall be based on the applicable standard in terms of pounds of volatile organic compounds per gallon solids or pounds of volatile organic compounds per gallon solids applied according to the applicable procedure in 9 VAC 5-20-121. Compliance may also be based on transfer efficiency greater than the board accepted baseline transfer efficiency if demonstrated by methods acceptable to the board according to the applicable procedure in 9 VAC 5-20-121.

9 VAC 5-40-4100. Test methods and procedures.

The provisions of 9 VAC 5-40-30 (Emission Testing) apply.

9 VAC 5-40-4110. Monitoring.

The provisions of 9 VAC 5-40-40 (Monitoring) apply.

9 VAC 5-40-4120. Notification, records and reporting.

The provisions of 9 VAC 5-40-50 (Notification, Records and Reporting) apply.

9 VAC 5-40-4130. Registration.

The provisions of 9 VAC 5-20-160 (Registration) apply.

9 VAC 5-40-4140. Facility and control equipment maintenance or malfunction.

The provisions of 9 VAC 5-20-180 (Facility and Control Equipment Maintenance or Malfunction) apply.

9 VAC 5-40-4150. Permits.

A permit may be required prior to beginning any of the activities specified below and the provisions of 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) and 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.) may apply. Owners contemplating such action should contact the appropriate regional office for guidance.

1. Construction of a facility.
2. Reconstruction (replacement of more than half) of a facility.
3. Modification (any physical change to equipment) of a facility.

4. Relocation of a facility.
5. Reactivation (restart-up) of a facility.

HISTORICAL NOTES:

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